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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,172	08/06/2003	ByungKyu Kim	P/2292-75	9168

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NEW YORK, NY 100368403

EXAMINER

LEUBECKER, JOHN P

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

S/A

Office Action Summary

Application No.

10/635,172

Applicant(s)

KIM ET AL.

Examiner

John P. Leubecker

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 2,3 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-10,14-18,21 and 22 is/are rejected.
- 7) ☒ Claim(s) 4,11-13,19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

1. Applicant's election of Species II in the reply filed on April 25, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 2, 3 and 5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Specification

3. The abstract of the disclosure is objected to because the phrase "Disclosed is" should not be used. In addition, the abstract is objected to because it merely recites the language of claim 1, and does not provide a concise statement of the technical disclosure. Applicant is reminded that the abstract should include that which is new in the art to which the invention pertains. It is noted that none of the features of the dependent claims are even mentioned in the abstract. Correction is required. See MPEP § 608.01(b).
4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

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5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference numeral (332) as described on page 9 of the specification with respect to Figure 4.

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Although claim 3 is withdrawn, the polymer (claim 3) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

8. Claims 14, 15, 19, 20, 21 and 22 are objected to because of the following informalities:
In each of claims 14, 15, 19, 20, 21 and 22, “camera” should be —camera device—to be consistent with what is being claimed in claim 1. Additionally, in claim 19, “a camera” should be —*the* camera [device]” unless a different camera is being referenced. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 17, “the recognizing camera” lacks antecedent basis. It appears that this should be —recognizing unit—(and it will be treated as such for the purposes of examination).

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 6 and 10 are rejected under 35 U.S.C. 102(a) as being anticipated by Wendlandt (U.S. Pat. 6,517,477).

Wendlandt discloses an endoscope system (Fig.1) having a body (2) comprising a cylinder (10,11, Fig.1) having a head unit (13) mounted by a camera device (col.5, lines 33-55) at one side thereof and connected to a tube (note portion of tube 2 on the proximal side of sheath 20, Fig.1) which is connected to an external device (any of 31,34), a front fixing unit (56, Fig.19) connected to the head unit installed to the outer circumference of the cylinder (150; note 150 is equated with 10,11, col.10, lines 15-29), a rear fixing unit (54, Fig.19) slidably installed at the outer circumference of the cylinder and a moving unit (154 or 156) connectedly installed between the front and rear fixing units. As to claim 6, note tool (col.5, lines 11-33). As to claim 10, note steering system (36, col.7, lines 45-52). As to claim

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wendlandt in view of Ruegg et al. (U.S. Pat 6,626,824).

Wendlandt disclose that “Any present tool for endoscopy can be adapted for use with the working channel 10” but obviously fails to list every known endoscopic tool. Ruegg et al. is just one of many references that demonstrate that media such a dyes is known to be used in conjunction with a working channel of an endoscope (col. 8, lines 35-44). It would have been obvious to one of ordinary skill the art, provided the level of ordinary skill and the teachings of Wendlandt and Ruegg et al. to have used a dye in the working channel of Wendlandt for the mere reason that dyes are used in this art.

In addition, with respect to claim 8, Ruegg et al. teaches that UV analysis light can be used as a tool, such light inherently having a frequency and being inherently generated by a source (i.e., frequency generating unit). It would have been obvious to one of ordinary skill the art, provided the level of ordinary skill and the teachings of Wendlandt and Ruegg et al. to have used frequency generating unit in the working channel of Wendlandt for the mere reason that such are used in this art.

15. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wendlandt in view of Black et al. (U.S. Pat. 6,869,397)

Wendlandt discloses a “light source” (14) but fails to disclose any particular frequency of light. Black et al. is just one of many references that teach that infrared light from an infrared source is known to be used in endoscopes (col.4, line 64 to col.5, line 10) for particular applications (e.g., fluorescence and spectroscopic diagnosis or treatment). It would have been obvious to one of ordinary skill in the art to have provided an infrared light source for the mere reason such are known to be used in the endoscope art.

16. Claims 14, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wendlandt in view of Borroni-Bird et al. (US 2003/0127261).

Wendlandt teaches that at least the steering of the device can be performed by some kind of user interface (col.7, lines 50-52) but fails to name any particular kind (probably since it does not matter what kind is used). Borroni-Bird et al. is just one of a many references that teach known alternative examples of user interfaces including a joystick, touchscreen and a control responsive to eye (which would include the pupil) movements for controlling a mechanism for movement ([0058]). It would have been obvious to one of ordinary skill in the art to have used any known user interface for controlling the movement of the Wendlandt device as a matter of personal preference or availability of certain interfaces.

17. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wendlandt in view of Borroni-Bird et al. and further in view of Hebert et al. (US 2005/0104802).

Wendlandt fails to teach how the image is displayed. Hebert et al. teaches that head mounted displays are known and used the surgical environment to “potentially offer a method to overcome viewing obstructions typical in a surgical environment” ([0006]). It would have been obvious to one of ordinary skill in the art to have used any means to display an image obtained by the Wendlandt device, especially one known to be desirable in a surgical environment. As to claim 17, it would be readily recognized by one of ordinary skill in the art that use of a HMD would obstruct the eyes of a wearer to the point that any measurement of eye movement would have to be done by a sensor attached to the HMD.

18. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wendlandt in view of Borroni-Bird et al. and Hebert et al. and further in view of Gevins. (U.S. Pat. 5,724,987).

Wendlandt, as obviously modified to use eye (e.g., pupil) movements as the user interface as taught by Borroni-Bird et al. does not suggest any particular sensor arrangement for detecting these eye movements. Gevins et al. teaches that it is known to use cameras (optoelectronic device that detects light reflections) or electromyograms to detect eye movements (col.9, lines 1-16). Since the particular sensors claimed have been recognized in the art to have application for detecting eye movements, it would have been obvious to one of ordinary skill in the art to have used, without any particular teaching in Borroni-Bird et al., any known sensor that has been contemplated for detecting eye movements.

Allowable Subject Matter

19. Claims 4, 11-13, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mills et al. (WO 99/53827)

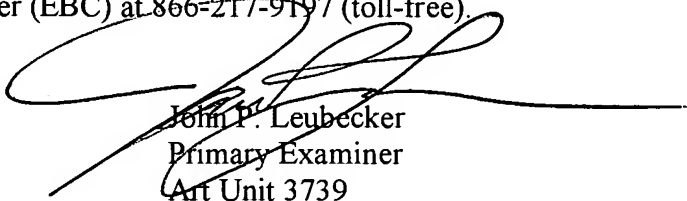
Chiel et al. (US 2003/0065250)

Choy (U.S. Pat. 3,895,637)	Krasner et al. (U.S. Pat. 4,676,228)
Shishido et al. (U.S. Pat. 5,090,259)	Uenishi et al. (U.S. Pat. 5,144,848)
Ortiz et al. (U.S. Pat. 5,398,670)	Dario et al. (U.S. Pat. 5,906,591)
Madni et al. (U.S. Pat. 6,007,482)	Torch (U.S. Pat. 6,542,081)
Abbott et al. (US 2002/0087525)	

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John P. Leubecker
Primary Examiner
Art Unit 3739